WHAT IS CLAIMED IS:

1. A method of removing fouling materials from the surface of a plurality of porous membranes arranged in a membrane module by providing, from within the module, by means other than gas passing through the pores of said membranes, gas bubbles in a uniform distribution relative to the porous membrane array such that said bubbles move past the surfaces of and vibrate said membranes to dislodge fouling materials therefrom, said membranes being arranged in close proximity to one another and mounted to prevent excessive movement therebetween.

2. A method according to claim 1 including mounting said membranes relative to one another so as to produce a rubbing effect between said membranes when vibrated.

3. A method according to claim 1 wherein the porous membranes comprise hollow fibre membranes.

4. A method according to claim 1 wherein the fibre membranes are arranged in bundles surrounded by a perforated cage which serves to prevent said excessive movement therebetween.

5. A method according to claim 1 including the step of providing gas bubbles from within the module by means of gas distribution holes or openings in a pot used to mount the fibre membranes.

6. A method according to claim 1 including the step of providing gas bubbles from within the module by means of at least one porous tube located within the module.

7. A method according to claim 1 including the step of providing gas bubbles from within the module by means of a tube or tubes positioned to output gas within the module.

8. A method according to claim 7 wherein the tubes are in the form of a comb of tubes containing holes which are located within the module.

9. A membrane module comprising a plurality of porous membranes, said membranes being arranged in close proximity to one another and mounted to prevent excessive movement therebetween, and means for providing, from within the module, by means other than gas passing through the pores of said membranes, gas bubbles such that, in use, said bubbles move past the surfaces of and vibrate said membranes to dislodge fouling materials therefrom.

10. A membrane module according to claim 9 wherein said porous membranes are mounted relative to one another so as to produce a rubbing effect between said membranes when vibrated.

11. A membrane module according to claim 9 wherein the porous membranes comprise hollow fibre membranes.

12. A membrane module according to claim 11 wherein the fibre membranes are arranged in bundles surrounded by a perforated cage which serves to prevent said excessive movement therebetween.

13. A membrane module according to claim 9 wherein the means for providing gas bubbles from within the module includes gas distribution holes or openings in a pot used to mount the membranes.

14. A membrane module according to claim 13 wherein a porous sheet is used in conjunction with the holes to provide a uniform distribution of gas bubbles.

15. A membrane module according to claim 9 wherein the means for providing gas bubbles from within the module includes a porous sheet through which gas is supplied to provide said gas bubbles.

16. A membrane module according to claim 9 wherein the means for providing gas bubbles from within the module includes at least one porous tube located within the module.

17. A membrane module according to claim 9 wherein the means for providing gas bubbles from within the module includes a tube or tubes positioned to output gas within the module.

18. A membrane module according to claim 17 wherein the tubes are in the form of a comb of tubes containing holes which sit within the module.

19. A membrane module according to claim 9 wherein the membranes comprise porous hollow fibres, the fibres being fixed at each end in a header, a lower header having a plurality of holes formed therein through which gas is introduced to provide the gas bubbles.

20. A membrane module according to claim 19 wherein the fibres are sealed at the lower end and open at their upper end to allow removal of filtrate.

21. A membrane module according to claim 19 wherein the fibres are mounted in a substantially taut manner between said headers.

22. A membrane module comprising a plurality of porous hollow membrane fibres extending longitudinally between and mounted at each end to a respective potting

head, said membrane fibres being arranged in close proximity to one another and mounted to prevent excessive movement therebetween, one of said potting heads having a distributed array of aeration holes formed therein and said fibres being substantially uniformly mounted in said one potting head relative to said aeration holes.

23. A membrane module according to claim 22 wherein said aeration holes are sized and located such that bubbles, formed by gas passing therethrough when the module is immersed in a liquid, pass substantially uniformly between each membrane.

24. A membrane module according to claim 23 wherein said porous membranes are arranged to be vibrated by means of said gas bubbles.

25. A membrane module according to claim 24 wherein said porous membranes are mounted relative to one another so as to produce a rubbing effect between said membranes when vibrated.

26. A membrane module according to claim 22 wherein the fibres are mounted in a substantially taut manner between said potting heads.

27. A method of removing accumulated solids from the surface of a plurality of porous hollow fibre membranes mounted and extending longitudinally in an array to form a membrane module, said membranes being arranged in close proximity to one another and mounted to prevent excessive movement therebetween, the method comprising the steps of providing, from within said array, by means other than gas passing through the pores of said membranes, uniformly distributed gas bubbles, said distribution being such that said bubbles pass substantially uniformly between each membrane in said array to scour the surface of and vibrate said membranes and remove accumulated solids from within the membrane module.

28. A method according to claim 27 including mounting said membranes relative to one another so as to produce a rubbing effect between said membranes when vibrated.

29. A method according to claim 27 wherein said membranes are mounted vertically to form said array and said bubbles pass generally parallel to the longitudinal extent of said fibres.

30. A method according to claim 29 wherein said uniformly distributed gas bubbles are provided at the lower end of the array.

31. A filtration system including a membrane module according to claim 9 wherein said membrane module is positioned vertically in a tank containing feed liquid to be filtered, and including means to apply a transmembrane pressure to said fibres in said array to cause filtrate to pass through pores in said fibres and means to supply continually or intermittently a supply of gas to said means for providing bubbles such that said gas bubbles move upwardly and uniformly between said fibres to scour the outer surfaces thereof.

32. A filtration system according to claim 31 wherein a backwash is used in conjunction with the scouring process to assist solids removal from the membrane pores and outer surface of the membranes.

33. A method of forming openings in a membrane pot comprising the steps of:

providing a mould for potting membrane ends, said mould having provided therein formations for forming said opening during the potting process;

positioning said membrane ends in said mould which is filled with a curable potting material;

allowing said potting material to at least partially cure; and

demoulding said membranes.